

Columbia River Salmon and Steelhead Endorsement Recreational Anglers Board
Application for Funding

Applicant: Washington Department of Fish and Wildlife (WDFW)

Contact: John Serl (360-628-4155), Chris Gleizes (360-864-6133), Cindy Le Fleur (360-906-6708)

Proposal Title: Lower Cowlitz River Tributary Resistance Board Weir Operation-
renewal (4)

Type of Proposal: Cowlitz River Steelhead Fishery Management

Date of Submission: January 26, 2015

Effective Period of Funding: May 1, 2016 - November 30, 2016

Amount of Funding Requested: \$111,396

Activities to be Funded: Maintain and operate four lower Cowlitz River tributary resistance board weirs to control straying of hatchery steelhead on the spawning grounds, enumerate winter and summer steelhead in these streams and to collect natural origin winter steelhead brood stock to continue an integrated steelhead program.

Background: Weirs, in particular resistance board weirs, are being used in Region 5 and statewide as a management tool to control hatchery fish on the spawning ground and to collect brood stock.

Recent genetic studies on wild steelhead in lower Cowlitz River tributaries have shown that hatchery steelhead are spawning with wild steelhead causing undesirable gene flow between hatchery and wild steelhead.

On the Cowlitz River, the recently renegotiated Cowlitz River Fishery and Hatchery Management Plan (FHMP), a requirement of Tacoma Power's FERC license, includes high production levels of hatchery winter and summer steelhead. Production levels, particularly of non-native summer steelhead, support the largest steelhead fishery in the state. However, to maintain the current production level, it requires that harvest rates remain high and stray rates of adult hatchery fish onto spawning grounds be tightly controlled to keep summer steelhead from spawning with native Endangered Species Act (ESA) listed steelhead or spawning with one another and causing negative ecological interactions between rearing offspring.

Another critical reason to operate these weirs is to monitor the abundance of natural origin winter steelhead in tributary streams to determine if their numbers are sufficient to continue collecting brood stock for an integrated hatchery winter steelhead program. Under the updated FHMP, an integrated hatchery winter steelhead program is required to maintain current production levels of both winter and summer steelhead.

Proposed Activity: This proposal seeks to acquire funding for staff to maintain and operate four lower Cowlitz River tributary resistance board weirs from May through November of 2016. Weirs are currently located on Ostrander, Delameter, Olequa, and Lacamas creeks. Weirs will be operated continuously during this period. Trap boxes and panels will be emptied, cleaned and repaired six days per week during this time frame.

Funding is also included to replace parts of weirs or portions of a weir should they become damaged during high flow events.

Effort/Assistance Required: This proposal seeks part time funding for a project biologist for oversight who will be responsible for developing operational protocols and assuring they are being followed by field staff and final report writing. This proposal also seeks partial year funding for an introductory level biologist to act as field lead for three scientific technicians.

As the overall goal is to operate these four tributary weirs year round, Tacoma Power provides funding for weir operation and maintenance from December through April, a five month period and CRSSE, May through November, for seven months.

Budget Summary:

Salaries and Benefits

Fish Biologist 4 (1 month @ \$7,749/mo.)	\$7,749
Fish Biologist 1 (7 months @ \$5,450)	\$38,150
Scientific Technician 2 (4 months @ \$4,504)	\$18,016
Scientific Technician 2 (4 months @ \$4,346)	\$17,384
Scientific Technician 2 (3 months @ \$3,883)	\$11,649
Personnel Service Charge	\$292
HRMS Service Charge	\$380

Goods and Services

Vehicle lease (7 mo. @ \$300)	\$2,100
Vehicle lease (7 mo. @ \$382)	\$2,676
Vehicle mileage	\$8,000
Weir Maintenance (flood damage, repair, improvements, etc.)	\$5,000

Total Budget Amount	\$111,396
----------------------------	------------------

Need for Proposed Activity: Controlling straying of hatchery fish onto native fish spawning grounds is a requirement to help protect ESA listed wild steelhead in the lower Cowlitz River tributaries.

Benefit of Proposed Activity:

Public/Angler Benefit: By controlling straying of hatchery steelhead onto native steelhead spawning grounds we will be able to maintain the present high level production of hatchery steelhead which in turn will help maintain the largest tributary summer steelhead sport fishery in the state. From 2010 through 2012, on average of approximately 86,000 angler trips generated a harvest of approximately 8,600 summer steelhead annually. The estimated minimum value of this fishery is \$ 4,988,000 per year.

Catch estimates are based on the WDFW Catch Record Card System. Economic values are based on Economic Analysis of the Non-Treaty Commercial and Recreational Fisheries in Washington State.

Benefit to the resource: Genetic studies have shown the presence of a unique stock of wild steelhead in the lower Cowlitz River. Reducing the interaction of hatchery and wild steelhead on the spawning grounds will assist the recovery of ESA listed steelhead in the lower Cowlitz River.

Additional Considerations: The Cowlitz River steelhead fishery is of significant benefit to local communities such as Longview, Kelso and Toledo along the Cowlitz River and also provides employment for a number of fishing guide services who come to the area from throughout the state.